

## **REMARKS**

### **Status of Claims**

The Office Action mailed February 9, 2006 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 51-186 were pending in the application with claims 52-54 and 106-186 withdrawn. Claims 57, 60-63, and 83-104 have been amended, claims 51-54 and 106-186 have been canceled and no claims have been newly added. Therefore, claims 55-105 are submitted for reconsideration.

This Amendment changes and deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

### **Objections to the Specifications and the Claims**

Applicant has amended the specification and the claims to address the issues raised in the office action. Accordingly, the pending claims and the specification are believed to be unobjectionable.

With respect to the objections to claims 75-79 in paragraph 5 of the office action, applicant notes that these claims are *prima facie* different from the corresponding features in claims 70-74 since they recite "a plurality of" in line 2 which is not recited in claims 70-74. Accordingly, this objection is believed to be incorrect.

### **Claims Rejections under 35 U.S.C. Section 112**

Claims 51 and 83-104 are rejected under 35 U.S.C. §112, second paragraph, for reasons indicated in paragraphs 7-10 of the office action. Applicant has cancelled claim 51 and amended the claims to address the issues raised in the office action. Accordingly, applicant submits that the pending claims are now in definite form and meet the requirements of 35 U.S.C. §112, second paragraph.

### **Prior Art Rejections**

Claims 55-61 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent no. 6,662,135 to Burns et al. (hereafter "Burns"). Claims 62-69 are rejected under 35

U.S.C. § 103(a) as being unpatentable over Burns as applied to claim 56 above, and further in view of U.S. Patent 3,798,608 to Huebner (hereafter "Huebner"). Claims 70-82 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Burns in combination with Huebner as applied to claims 62-64, 66, and 69, respectively and further in view of U.S. Patent 3,303,284 to Lender (hereafter "Lender"). Claim 105 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Burns in combination with Huebner as applied to claim 62 above, and further in view of U.S. Patent 5,586,054 to Jensen et al. (hereafter "Jensen").

Applicant traverses these rejections for at least the following reasons.

First, Burns is not valid prior art to the pending claims. Burns has a 102(e) date of December 8, 1998 while the present application has a perfected claim to priority which dates back to January 10, 1998. Accordingly, with Burns removed as a reference, the office action fails to make a prima facie rejection with respect to any of the pending claims.

*Second*, neither Burns nor any of the other applied references discloses or suggests the features recited in independent claim 55. Specifically, claim 55 recites, *inter alia*, **"reflecting said signal back to said first equipment in a manner corresponding to a first bit sequence."** That is, the signal is reflected back in a variable manner that varies corresponding to the first bit sequence. This deliberate, variable reflection (in a manner corresponding to a first bit sequence) is not taught or suggested by Burns.

Specifically, Burns discloses in col. 8, lines 52-60, the generation of a known modulated signal which is reflected back to the modem and compared to the original known test signal to compare the operation of the modem. Col. 10, lines 43-46 of Burns, for example, further explain that "if the modulator 390 and the demodulator 340 are operating perfectly, the pseudo-random bit sequence coming out of the demodulator 340 should be equivalent to the pseudo-random bit sequence entering the modulator 390." However, this teaches a simple, constant reflection in sharp contrast to the claimed reflection of the signal back to the first equipment in a manner corresponding (i.e., varied according) to a first bit sequence. See, for example, claim 60 which further recites that the reflective property of the termination is varied in a manner corresponding to the first bit sequence.

Therefore, Burns teaches a constant reflection which is different from, and teaches away, from the deliberately variable reflection recited in the pending independent claim 55. Furthermore, since the deficiencies of Burns is not cured by any of the other applied

references, the office action fails to make a *prima facie* rejection of the pending independent claim 55.

The dependent claims are also patentable for at least the same reasons as the independent claim 55 on which they ultimately depend. In addition, they recite additional features that are patentable when considered as a whole. For example, as discussed above, the features recited in claim 60 are also not disclosed by the applied prior art and provides additional reasons for the patentability of that claim.

**Conclusion**

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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